

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Thomas J. Holman et al.

Application No.: *Concurrently herewith*

Filed: *Pending*

For: CATHETER WITH REMOVABLE BALLOON
PROTECTOR AND STENT DELIVERY
SYSTEM WITH REMOVABLE STENT
PROTECTOR

Examiner: Not assigned yet

Group Art Unit: Not assigned yet

Commissioner for Patents
Washington, D.C. 20231

Docket No.: S63.2-10186

PRELIMINARY AMENDMENT

Before beginning examination and calculation the fees in this application, please amend the above-identified application as indicated below:

In The Specification

Page 1, please delete the paragraph starting at line 5 and insert the following:

-- This application is a continuation of 09/528,613, filed March 20, 2000 which is a division of 09/034, 434, filed March 4, 1998, now US 6,152,944, which Issued November 28, 2000, which is a continuation-in-part of 08/812,351, filed March 5, 1997, now US 5,893,868, incorporated herein by reference. --

In the Claims:

1.(Amended) A medical device comprising:

a catheter comprising a proximal portion, a distal portion, a shaft and an expandable member located at the distal portion, said expandable member being constructed and arranged for expanding the outer diameter of said catheter from a contracted state to an expanded state; and

a protector comprising a removable sleeve positioned around the expandable member, said sleeve comprising a first end and a second end and having a variable inner diameter.

17.(Amended) A medical device comprising:

a catheter comprising a proximal portion, a distal portion, a shaft and an expandable member located at the distal portion, said expandable member being constructed and arranged for expanding the outer diameter of said catheter from a contracted state to an expanded state; and

a removable protector comprising:

a first removable inner sleeve positioned around the expandable member, said sleeve comprising a first end and a second end;

a second removable outer sleeve positioned over the first sleeve, said second sleeve having a first end and a second end,

said first and second sleeves being removed prior to use of the medical device.

35.(Amended) A stent delivery system comprising:

a catheter comprising a proximal portion, a distal portion, a shaft and an expandable member located at the distal portion, said expandable member having a first end and a second end and being constructed and arranged for expanding the outer diameter of said catheter from a contracted state to an expanded state;

a radially expandable stent of generally cylindrical configuration positioned around said distal portion of said catheter around the expandable member, said stent having a contracted condition, being sized in the contracted condition to closely surround the catheter in the contracted state, and further being expandable to an expanded condition;

a removable stent protector comprising a first removable sleeve in the region of the distal portion of the catheter positioned around the stent, said first sleeve further comprising a first end, and a second end, said first sleeve having a variable inner diameter to ease sliding the first sleeve over the balloon and stent, said stent protector being removed prior to use of the stent delivery

system and release of the stent by expansion of the balloon.

53.(Amended) The stent delivery system of claim 35 wherein the stent protector further comprises a second removable sleeve having a first end and a second end, said second sleeve being positioned over the first sleeve and having a constrictive relationship with said first sleeve.

73.(Amended) The stent delivery system of claim 53 wherein the first sleeve further comprises a removal member extending from the second end thereof, said removal member comprising a tail.

74.(Amended) A system for intraluminal delivery of a stent comprising: a balloon catheter comprising a shaft, a balloon associated with a distal portion of the shaft for receiving a stent, the shaft further comprising at least one dam and an inflation lumen associated with the balloon for inflation thereof; a stent retainer comprising a first removable sleeve for positioning around a stent and a second removable sleeve for positioning around the first sleeve such that the first sleeve is compressed by the second sleeve to an inner diameter less than or equal to the outer diameter of the at least one dams, said first and second sleeves being removed prior to use of the delivery system and release of a stent mounted to the catheter for delivery thereof by expansion of the balloon.

85.(New) The medical device of claim 17 wherein said sleeve has a variable inner diameter.

REMARKS


The claims have been amended as indicated to provide a scope of protection that differs from the claims allowed in preceding applications.

Respectfully submitted,

VIDAS, ARRETT & STEINKRAUS

Date: October 26, 2001

By:



Scott Q. Vidas
Registration No.: 30,812

6109 Blue Circle Drive, Suite 2000
Minnetonka, MN 55343-9185
Telephone: (952) 563-3000
Facsimile: (952) 563-3001
F:\WPWORK\SQV\10186AMD.A24

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please amend the claims as follows:

1.(Amended) A medical device comprising:

a catheter comprising a proximal portion, a distal portion, a shaft and an expandable member located at the distal portion, said expandable member being constructed and arranged for expanding the outer diameter of said catheter from a contracted state to an expanded state; and

a protector [means] comprising a removable sleeve positioned around the expandable member, said sleeve comprising a first end and a second end and having a variable inner diameter.

17.(Amended) A medical device comprising:

a catheter comprising a proximal portion, a distal portion, a shaft and an expandable member located at the distal portion, said expandable member being constructed and arranged for expanding the outer diameter of said catheter from a contracted state to an expanded state; and

a removable protector [means] comprising:

a first removable inner sleeve positioned around the expandable member, said sleeve comprising a first end and a second end [and having a variable inner diameter];

a second removable outer sleeve positioned over the first sleeve, said second sleeve having a first end and a second end,

said first and second sleeves being removed prior to use of the medical device.

35.(Amended) A stent delivery system comprising:

a catheter comprising a proximal portion, a distal portion, a shaft and an expandable member located at the distal portion, said expandable member having a first end and a second end and being constructed and arranged for expanding the outer diameter of said catheter from a

contracted state to an expanded state;

a radially expandable stent of generally cylindrical configuration positioned around said distal portion of said catheter around the expandable member, said stent having a contracted condition, being sized in the contracted condition to closely surround the catheter in the contracted state, and further being expandable to an expanded condition;

a removable stent protector [means] comprising a first removable sleeve in the region of the distal portion of the catheter positioned around the stent, said first sleeve further comprising a first end, and a second end, said first sleeve having a variable inner diameter to ease sliding the first sleeve over the balloon and stent, said stent protector [means] being removed prior to use of the stent delivery system and release of the stent by expansion of the balloon.

53.(Amended) The stent delivery system of claim 35 wherein the stent protector [means] further comprises a second removable sleeve having a first end and a second end, said second sleeve being positioned over the first sleeve and having a constrictive relationship with said first sleeve.

73.(Amended) The stent delivery system of claim 53 wherein the first sleeve further comprises a removal member [means] extending from the second end thereof, said removal [means] member comprising a tail.

74.(Amended) A system for intraluminal delivery of a stent comprising: a balloon catheter comprising a shaft, a balloon associated with a distal portion of the shaft for receiving a stent, the shaft further comprising at least one dam and an inflation lumen associated with the balloon for inflation thereof; a stent retainer [retaining means] comprising a first removable sleeve for positioning around a stent and a second removable sleeve for positioning around the first sleeve such that the first sleeve is compressed by the second sleeve to an inner diameter less than or equal to the outer diameter of the at least one dams, said first and second sleeves being removed prior to use of the delivery system and release of a stent mounted to the catheter for

delivery thereof by expansion of the balloon.

85. (New) The medical device of claim 17 wherein said sleeve has a variable inner diameter.

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